

Serial No.: 10/724,272

Docket No.: UNI 0050 PA/40809.67

**Amendments to the Specification**

Please replace [0006] with the following replacement paragraph:

[0006] In accordance with yet another embodiment of the present invention, a method of producing polycrystalline yttrium aluminum garnet is provided. The method comprises: providing a compact comprising at least one powder selected from undoped yttrium aluminum garnet, doped yttrium aluminum garnet, ~~a powder mixture having undoped yttrium aluminum perovskite, and a powder mixture having doped yttrium aluminum perovskite~~; sintering the compact in flowing oxygen at temperatures of between about 1600 °C to about 1650 °C such that sintered yttrium aluminum garnet is formed; and hot isostatically pressing the sintered yttrium aluminum garnet at temperatures of between about 1500 °C to about 1550 °C and at a pressure between about 25 kpsi to about 30 kpsi such that a transparent polycrystalline yttrium aluminum garnet is formed having a mean grain size between about 1  $\mu\text{m}$  to about 3  $\mu\text{m}$ .